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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/612,972

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466 7590 07/26/2007  
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EXAMINER

LEFF, STEVEN N

ART UNIT

PAPER NUMBER

1761

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/612,972	Applicant(s) HOLZSCHUH ET AL.	
	Examiner Steven Leff	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-25,30-33,35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-25,30-33,35 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

- Claim 17 recites the limitation "said material" on line 8. Applicant is encouraged to maintain consistent terminology throughout the claims. The phrase "said material" should be replaced with said organic material.
- Claim 30 recites the limitation "said liquid smoke" on lines 9-10. Applicant is encouraged to maintain consistent terminology throughout the claims. The phrase "said liquid smoke" should be replaced with said liquid smoke flavor.
- The word "Celsius" in claim 23 is misspelled.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 30-33, and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - The phrase "the tubular element or elements", of claim 30 lacks antecedent basis.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

- Claims 17-25, 30-33, and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. (4255129) in view of Weissman (3012124).

With respect to claims 17-25, 30-33, and 35-36, Reed et al. teach a process for the production of smoke, where the smoke is obtained by pyrolysis of an organic material (col. 6 line 1+). More specifically Reed et al. teach introducing the organic material to be pyrolyzed into a pyrolysis reactor comprising a heatable chamber substantially sealed (col. 4 line 47+), containing at least one ascending tubular element that is vibrated and receives the organic material (col. 9 line 19+). Reed et al. further teach that the material is introduced at the level of the lower portion of the tubular element (col. 10 line 12+), where the chamber is at a temperature comprised between 300°C and 400°C (col. 18 line 13, i.e. sawdust heated to 700F) so as to produce pyrolysis during its movement, under the effect of vibrations, in the ascending tubular element or elements (abstract).

Reed et al. further teach extracting the consumed organic material and the produced smoke at the level of the upper portion of said tubular element or elements (col. 12 line 34), where the tubular element or elements are given a vibratory movement having a horizontal and/or vertical component (col. 11 line 1+). The organic material is dried by preheating before it is pyrolyzed (col. 14 line 45+), and the smoke produced is condensed at the outlet of the reactor in a suitable condensation device (col. 6 line 2+). Reed et al. continue by teaching that at least one portion of the pyrolysis gas present at the outlet of the condensation device is re-injected into the reactor (col. 12 line 2+), where pyrolysis takes place under strict control, to about 0.1%, of the volume content of oxygen in said reactor (col. 15 line 26+), and to about one degree Celsius, of the temperature prevailing in the reactor (col. 8 line 5+). In addition the pyrolyzed organic material consists essentially of woodchips or essentially of fibers or chips of at least one vegetable substance (col. 16 line 53+).

Regarding claims 30-33 and 36, Reed et al. teach a process for producing liquid smoke flavor, comprising introducing organic material to be pyrolyzed into a pyrolysis

reactor (abstract), in the reactor at a temperature comprised between 300°C and 400°C (col. 18 line 13, i.e. sawdust heated to 700F) so as to produce pyrolysis under the effect of vibrations (abstract), and further extracting the consumed organic material and the liquid smoke (col. 6 line 2+). Reed et al. further teach that the organic material is dried by preheating before it is pyrolyzed (col. 14 line 45+),.

With respect to claims 30-33 and 36, Weissman teaches a smoke generator for generating smoke from hard wood chips to be used in curing comestibles (col. 1 line 7+). More specifically with respect to claims 17 and 30, Weissman teaches a tubular element which is vibrated for its art recognized and applicant's intended function of moving the material within the chamber in a uniform manner (col. 2 line 40+).

Therefore with respect to claims 17 and 30 specifically, although Reed et al. is silent with respect to the conveying device being tubular in shape, Reed et al. does teach the use of a lip in conjunction with conveying device which allows the material to remain within the conveying device regardless of the fact that the conveying device is being vibrated. It is further noted that due to the organic material traveling in an upward fashion, the rate of vibration would be required to be stronger due to the fact that the material is working against gravity as opposed to with gravity as is the case if the material were descending.

In addition, Weissman does specifically teach a tubular element which is vibrated and receives the organic material. Therefore one of ordinary skill in the art would have been motivated to combine the teachings of Reed et al. and Weissman and produced liquid smoke using a tubular element for conveying the material in order to further guarantee that none of the material is "thrown" from the conveyor due to the vibrations, in addition to the fact that the tubular element allows for a smaller heating area which needs to be heated in order to achieve the expected results in a shorter amount of time due to the smaller heating area.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to teach a tubular element which conveys the organic material in an ascending fashion in order to further enhance the overall efficiency of the process due to a more confined environment.

Regarding claims 35 and 36, although Reed et al. do not specifically state that material is heated directly by the tubular elements, one of ordinary skill in the art would

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expect some heating to take place due to the temperature of the conveyor being affected by the atmosphere temperature within the area which it is located in, thereby heating the conveyor. In addition, Weismann does specifically state directly heating the trough with heat bars (fig. 3 ref. # 20, col. 3 line 1+) for its art recognized and applicant's intended function of allowing the temperature within the chamber to be more easily controlled due to the fact that the heaters are focused in a specific region with respect to the food itself and the tubular element, where the heating method of Reed et al. generally heats an entire area which requires a greater amount of electrical energy to not only maintain a temperature but also in order to raise the temperature at the start of the process.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to teach direct heating of the tubular element which conveys the organic material, using the Joule effect, in order to further enhance the overall efficiency of the process due to a more confined environment or space.


### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Leff whose telephone number is (571) 272-6527. The examiner can normally be reached on Mon-Fri 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SL



**KEITH HENDRICKS**  
**PRIMARY EXAMINER**